III Semester M.Com. Examination, January 2017
(CBCS)
COMMERCETE

Time: 3 Hours
Max. Marks: 70

Instruction: Answer all the sub-sections.

SECTION – A

1. Answer any seven of the following. Each question carries two marks. (7x2=14)
   a) State the key difference between cost accounting and cost management.
   b) Define cost drivers.
   c) Why do you think product life cycle is bell-shaped?
   d) Differentiate cost control and cost reduction.
   e) Define strategy.
   f) What do you mean by target costing?
   g) State the phases in product life cycle.
   h) What do you mean by opportunity cost?
   i) What do you mean by "Zero based budgeting"?
   j) Define lean cost management.

SECTION – B

Answer any four of the following. Each question carries five marks. (4x5=20)

2. What do you understand by cost drivers? Identify various cost drivers in textile industry.

3. "The concept of performance budgeting relates to greater management efficiency especially in government organisations" explain.
4. Define variance analysis. What are the ways of disposing cost variances?

5. "Money spent on installing a costing system is not an expense but an investment" comment.

6. The worker is paid Rs. 50.00 per hour and the 5 days working week contains 42 hours. The daily allowance for approved absence from his place of work, maintenance of machine, etc., is 12 minutes and his job cards show that his time chargeable during the week to various cost centers is as follows:

   Job No. 305  20 hours
   Job No. 310  10 hours
   Job No. 320  8 hours

   Time unaccounted for is caused by a power failure. Show how for the week would be dealt in the cost accounts.

7. Kurolin express is a large manufacturer of recreational equipment. Performance of the camping division is measured as an investment centre because the managers make all the decisions about investments in operating equipment and space. Following is financial information for the provision:

   Average operating assets  Rs. 20,00,000
   Current liabilities       Rs. 5,00,000
   Operating income         Rs. 3,00,000

   Camping division's required rate of return is 12%, but outdoor express's weighted average cost of capital is 9% and the tax rate is 30%.

   a) Calculate ROI
   b) Calculate the residual income
   c) Calculate Economic Value Added (EVA).
SECTION - C

Answer any three of the following. Each question carries twelve marks. (3x12=36)

8. Alpha Limited has decided to analyse the profitability of its five new customers. It buys bottled water at Rs. 90 per case and sells to retail customers at a list price of Rs. 108 per case. The data pertaining to five customers are:

<table>
<thead>
<tr>
<th>Customers</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cases sold</td>
<td>4,680</td>
<td>19,688</td>
<td>1,36,800</td>
<td>71,550</td>
<td>8,775</td>
</tr>
<tr>
<td>List selling price</td>
<td>Rs. 108</td>
<td>Rs. 108</td>
<td>Rs. 108</td>
<td>Rs. 108</td>
<td>Rs. 108</td>
</tr>
<tr>
<td>Actual selling price</td>
<td>Rs. 108</td>
<td>Rs. 106.20</td>
<td>Rs. 99</td>
<td>Rs. 104.40</td>
<td>Rs. 97.20</td>
</tr>
<tr>
<td>Number of purchase orders</td>
<td>15</td>
<td>25</td>
<td>30</td>
<td>25</td>
<td>30</td>
</tr>
<tr>
<td>Number of customer visits</td>
<td>2</td>
<td>3</td>
<td>6</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Number of deliveries</td>
<td>10</td>
<td>30</td>
<td>60</td>
<td>20</td>
<td>40</td>
</tr>
<tr>
<td>Kilometers travelled per delivery</td>
<td>20</td>
<td>6</td>
<td>5</td>
<td>10</td>
<td>30</td>
</tr>
<tr>
<td>Number of expedited deliveries</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
</tbody>
</table>

Its five activities and their cost drivers are:

<table>
<thead>
<tr>
<th>Activity</th>
<th>Cost Driver Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Order taking</td>
<td>Rs. 750 per purchase order</td>
</tr>
<tr>
<td>Customer visits</td>
<td>Rs. 600 per customer visit</td>
</tr>
<tr>
<td>Deliveries</td>
<td>Rs. 5.75</td>
</tr>
<tr>
<td>Product handling</td>
<td>Rs. 3.75 per case sold</td>
</tr>
<tr>
<td>Expedited deliveries</td>
<td>Rs. 2,250 per expedited delivery</td>
</tr>
</tbody>
</table>

Required:

i) Compute the customer-level operating income of each of five retail customers now being examined (A, B, C, D and E). Comment on the results.

ii) What insights are gained by reporting both the list selling price and the actual selling price for each customer?

iii) What factors Alpha Limited should consider in deciding whether to drop one or more of five customers?
9. A machine used on a production line must be replaced at least every four years. The costs incurred in running the machine according to its age are:

<table>
<thead>
<tr>
<th>Particulars</th>
<th>Age of machine (years)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0</td>
</tr>
<tr>
<td>Purchase price</td>
<td>3,000</td>
</tr>
<tr>
<td>Maintenance</td>
<td>800</td>
</tr>
<tr>
<td>Repairs</td>
<td>200</td>
</tr>
<tr>
<td>Net realizable value</td>
<td>1,500</td>
</tr>
</tbody>
</table>

Future replacement will be identical machines with the same costs. Revenue is unaffected by the age of the machine. Assume there is no inflation and ignore tax. The cost of capital is 15%. Determine the optimum replacement cycle. Present value factors at 15% for years 1, 2, 3 and 4 are 0.8696, 1.6257, 2.2832 and 2.8550 respectively.

10. Discuss the statement that “fixed overheads are constant within a limited range of output”.

11. What do you understand by JIT? Explain how it eliminates wastage of resources.

12. What do you understand by cost reduction? “Cost reduction is the key for global competitiveness”. Comment.
III Semester M.Com. Examination, December 2015
(CBCS Scheme)
COMMERCE
Paper - 3.4 AT: Strategic Cost Management - I

Time: 3 Hours
Max. Marks: 70

Instruction: Attend all the questions.

SECTION - A

1. Answer any seven sub-questions of the following, each sub-question carries two marks:

   a) Differentiate cost control and cost reduction.
   b) Differentiate between cost management and cost accounting.
   c) State the steps in activity-based costing.
   d) State the benefits of product life cycle.
   e) State the objectives of JIT.
   f) Define Kaizen costing.
   g) What are the benchmarking codes of conduct?
   h) What do you mean by LCC?
   i) What do you mean by cost drivers and cost pools?
   j) What do you mean by lean cost management?

   (7×2=14)

SECTION - B

Answer any four questions of the following, each question carries five marks:

2. Define ABC. How does the ABC system support the corporate strategy?

3. Briefly explain how JIT eliminates wastage of resources.

4. How is the Life Cycle Costing model selected and developed?

5. Briefly explain the steps in strategic cost management programme.

6. Bringout the main activities and cost drivers identified and implemented by J. Innes and F. Mitchell.

   (4×5=20)
7. In organic Chemical Ltd., is about to replace its old boiler equipment, either by a coal fired system or by an oil-fired system. Finance costs 15% a year, and other estimated costs are as follows:

\[
\text{(Rs. '000)}
\begin{array}{|c|c|c|}
\hline
\text{Coal} & \text{Oil} \\
\hline
\text{Initial cost of Boiler} & 70 & 100 \\
\text{Annual operating costs} & 60 \text{ p.a} & 45 \text{ p.a} \\
\hline
\end{array}
\]

If the company expected the new boiler system to last at least fifteen years, which system should be chosen? (PV of Annuity of Re. 1 at 15% for 15 years = 5.847)

SECTION - C

Answer any three of the following. Each question carries twelve marks: (3x12=36)

8. The Columbus Company produces only two products: a major computer part and cell phones. The company uses a normal cost system and overhead costs are currently allocated using a plant-wide overhead rate based on direct labor hours. Outside cost consultants have recommended, however, that the company use activity-based costing to charge overhead to products.

The company expects to produce 4,000 computer parts and 2,000 cell phones in 2014. Each computer part requires two direct labor hours to produce and each cell phone requires one-half hour to produce.

The direct material and direct labor costs included in the two products are as follows:

\[
\begin{array}{|c|c|c|}
\hline
\text{Item} & \text{Computer Part} & \text{Cell-Phone} \\
\hline
\text{Direct Material (per unit)} & \text{Rs. 3,000} & \text{Rs. 1,700} \\
\text{Direct Labor (per unit)} & \text{Rs. 1,600} & \text{Rs. 400} \\
\hline
\end{array}
\]
Budgeted (Estimated) Total Factory Overhead Data for 2014:

<table>
<thead>
<tr>
<th>Activity</th>
<th>Budgeted Overhead Rs.</th>
<th>Estimated Volume Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Production setups</td>
<td>Rs. 80,00,000</td>
<td>20 setups</td>
</tr>
<tr>
<td>Material Handling</td>
<td>Rs. 70,00,000</td>
<td>5,000 lbs.</td>
</tr>
<tr>
<td>Packaging and shipping</td>
<td>Rs. 1,20,00,000</td>
<td>6,000 boxes</td>
</tr>
<tr>
<td>Total Factory Overhead</td>
<td>Rs. 2,70,00,000</td>
<td></td>
</tr>
</tbody>
</table>

Based on an analysis of the three overhead activities, it was estimated that the two products would require these activities as follows in 2014:

<table>
<thead>
<tr>
<th>Activity</th>
<th>Computer Parts</th>
<th>Cell Phones</th>
<th>Overall Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Production setups</td>
<td>5 setups</td>
<td>15 setups</td>
<td>20 setups</td>
</tr>
<tr>
<td>Material handling</td>
<td>1,000 lbs.</td>
<td>4,000 lbs.</td>
<td>5,000 lbs.</td>
</tr>
<tr>
<td>Packaging and shipping</td>
<td>4,000 boxes</td>
<td>2,000 boxes</td>
<td>6,000 boxes</td>
</tr>
</tbody>
</table>

Required:

a) Calculate the cost of each product using a plant-wide rate based on direct labor hours.

b) Calculate the activity cost rates for (a) setups, (b) material handling and (c) packaging and shipping.

c) Cost out the two products using an activity-based costing system.
9. A machine used on a production line must be replaced at least every four years.

   The costs incurred in running the machine according to its age are:

   \[
   \begin{array}{|c|c|c|c|c|}
   \hline
   \text{Particulars} & \text{Age of machine (Years)} \\
   \hline
   & 0 & 1 & 2 & 3 & 4 \\
   \hline
   \text{Purchase price} & 3,000 & & & & \\
   \text{Maintenance} & 800 & 900 & 1,000 & 1,000 & \\
   \text{Repairs} & 200 & 400 & & 800 & \\
   \text{Net realizable value} & 1,600 & 1,200 & 800 & 400 & \\
   \hline
   \end{array}
   \]

   Future replacement will be identical machines with the same costs. Revenue is unaffected by the age of the machine. Assume there is no inflation and ignore tax. The cost of capital is 15\%. Determine the optimum replacement cycle.

   Present value factors at 15\% for years 1, 2, 3, 4 are 0.8696, 0.7561, 0.6575 and 0.5718 respectively. Present value of annuity at 15\% for years 1, 2, 3 and 4 are 0.8696, 1.6257, 2.2832 and 2.8550 respectively.

10. What are the objectives of JIT approach? Is JIT responsible for bringing changes in a firm? Explain.

11. Explain how life cost analysis is prepared, implemented and monitored.

12. What do you mean by Benchmarking? Describe main types of benchmarking of critical success factor.